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| APPLICATION NO. | F | TLING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|------|---------------------|----------------------|-------------------------|------------------|
| 10/722,157 | | 11/25/2003 | Shuzo Iwashita | 81863.0024 | 7015 |
| 26021 | 7590 | 10/27/2005 | | EXAMINER | |
| HOGAN & | | · • - · - · - · - · | LOPEZ, CARLOS N | | |
| 500 S. GRAND AVENUE SUITE 1900 LOS ANGELES, CA 90071-2611 | | | | ART UNIT | PAPER NUMBER |
| | | | | 1731 | - |
| | | | | DATE MAILED: 10/27/2009 | 5 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|--|--|--|--|--|--|
| Office Action Summer | 10/722,157 | IWASHITA ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Carlos Lopez | 1731 | | | |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet with the | correspondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE | N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on 23 A | ugust 2005. | | | | |
|)☐ This action is FINAL . 2b)☐ This action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under E | Ex parte Quayle, 1935 C.D. 11, 4 | .53 O.G. 213. | | | |
| Disposition of Claims | | | | | |
| 4) ☐ Claim(s) 1-30 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) 1-30 are subject to restriction and/or expressions. | wn from consideration. | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex | epted or b) objected to by the drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob | ee 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d). | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list | s have been received. Is have been received in Applications In the second secon | tion No red in this National Stage | | | |
| Attachment(s) | 4) 🔲 Interview Summary | v (PTO-413) | | | |
| P) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail D | Date | | | |
| B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal (6) Other: | Patent Application (PTO-152) | | | |

DETAILED ACTION

A corrected restriction requirement is being mailed to clarify that product claims 14-16, 26-27 and 29 should have been placed in group II and claim 28 placed in group IV.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-5, drawn to piezoelectric ceramics with thickness, surface flatness, and plane variation, classified in class 310, subclass 358.
- II. Claims 14-19, 25-27 and 29-30, drawn to an actuator comprising piezoelectric substrate, classified in class 156, subclass 73.6.
- III. Claims 6-16, 26, 27, 28, and 29, drawn to a method of manufacturing piezoelectric ceramics comprising firing a green compact, classified in class 264, subclass 671.
- IV. Claims 20-24, and 28 drawn to a method of manufacturing an actuator, classified in class 156, subclass 89.12.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the

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particulars of the subcombination as claimed because there is no mention of the flatness or total flatness in the combination. The subcombination has separate utility such as using the piezoelectric ceramic may be used in an accelerometer, for example.

Inventions III and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by a materially different process such as a film forming process that does not require firing the ceramic.

Inventions IV and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by a materially different process such as a film forming process that does not require firing the ceramic.

Inventions I and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions to a piezoelectric ceramics of group I is not

capable of use together, has different modes of operation, different functions, or different effects than a method of manufacturing an actuator of group IV.

Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions to an actuator of group II is not capable of use together, has different modes of operation, different functions, or different effects than a method of manufacturing a piezoelectric of group III.

Inventions III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions to a method of manufacturing piezoelectric ceramics of group III not capable of use together, has different modes of operation, different functions, or different effects than a method of manufacturing an actuator of group IV.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Groups I-IV are not coextensive, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

A telephone call was made to Lawrence Mclure on 10/20/05 to request an oral election and the noted corrections of the previous restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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